

## List of Revisions to Draft Reg. No. 2 Post Public Comment

### Reg. 2.104, Policy for Compliance (page 1-2)

The second sentence was revised to state “Consequently, compliance schedules may be included in National Pollutant Discharge Elimination System (NPDES) permits at the time of renewal or permit modification initiated by the Department to require compliance with new water quality standards.”

### Reg. 2.106, Definitions, Critical flows (page 1-3)

Revise the definition as follows:

**Critical flows:** The flow volume used as background dilution flows in calculating concentrations of pollutants from permitted discharges. These flows may be adjusted for mixing zones. The following critical flows are applicable:

For a seasonal ~~fishery~~ aquatic life - 1 cubic foot per second (cfs) minus the design flow of any point source discharge (may not be less than zero);

For human health ~~criteria~~ - harmonic mean flow or long term average flow;

For minerals ~~criteria~~ - harmonic mean flow ~~or 4 cfs, except in those waters listed in Reg. 2.511. Those waters in Reg. 2.511 which are noted with an asterisk will have a critical flow of 4 cfs. (Also see minerals implementation procedure in CPP),~~ except as follows:

- Reg. 2.511(A) Site Specific Mineral Criteria listed with an asterisk- 4 cubic feet per second.
- Reg. 2.511 (C) Domestic Water Supply: Q7-10; and

For ~~all others~~ metals and conventional pollutants - ~~the critical flow will be~~ Q7-10.

### Reg. 2.106, Definitions, Harmonic Mean Flow (page 1-5)

The previously approved definition from 2011 was retained. “**Harmonic mean flow:** The reciprocal of the mean of the reciprocals of daily flow measurements.”

### Reg. 2.106, Definitions, Nonpoint source (page 1-6)

To clarify, this definition was revised as follows: “**Nonpoint source:** A contributing factor to water pollution that is not confined to an end-of-the-pipe discharge, i.e., stormwater runoff not regulated under Clean Water Act § 402(p)(1), 33 U.S.C. § 1342(p)(1), agricultural or silvicultural runoff, irrigation return flows, etc.”

### Reg. 2.106, Definitions, Primary Season Critical Flow (page 1-7)

This definition was deleted. The phrase “primary season critical flow” is not used anywhere in the regulation outside of this definition, therefore it is unnecessary.

### Reg. 2.106, Definitions, State of Arkansas Continuing Planning Process (page 1-7)

The phrase “The CPP is not a regulation.” was retained at the end of the definition.

**Reg. 2.404, Mixing Zones (page 4-1)**

The following proposed revisions were removed:

,pH except as specified in 40 C.F.R. § 133.102(c)),

Careful consideration will be given to the appropriateness of a mixing zone where a substance discharged is bioaccumulative, persistent, carcinogenic, mutagenic, or teratogenic.

A mixing zone shall not apply to any public or private domestic water supply intake or public water supply well.”

The phrase “A mixing zone shall not include any domestic water supply intake.” was retained.

The first sentence is revised as: “Where Mmixing zones are allowed for all parameters not specifically excluded in Reg. 2.404 and the effects of wastes on the receiving stream shall be determined after the wastes have been thoroughly mixed with the mixing zone volume.”

**Reg. 2.502, Temperature. (page 5-1)**

The last sentence of the first paragraph was revised to read “The following standards are applicable:”

**Reg. 2.503, Turbidity, (page 5-2)**

The paragraph was revised to state “There shall be no distinctly visible increase in turbidity of receiving waters attributable to discharges or instream activities. The values below should not be exceeded during base flow (June to October) in more than 20% of samples. The values below should not be exceeded during all flows in more than 25% of samples taken in not less than 24 monthly samples.”

**Reg. 2.504, pH, (page 5-2)**

The proposed sentence "No mixing zones are allowed for pH (except as specified in 40 CFR § 133.201(c))." was stricken from the regulation.

**Reg. 2.507, Bacteria (page 5-6)**

The currently approved statement was retained; “For assessment of ambient waters as impaired by bacteria, the below listed applicable values for *E. coli* shall not be exceeded in more than 25% of samples in no less than eight (8) samples taken during the primary contact season or during the secondary contact season.”

**Reg. 2.507, Bacteria (page 5-7)**

The following footnotes were added to the IS and GM criteria as appropriate:

<sup>3</sup>For assessment of Individual Sample Criteria – at least eight (8) data points

<sup>4</sup>For calculation and assessment of Geometric Mean – calculated on a minimum of five (5) samples spaced evenly and within a thirty (30) -day period.

**Reg. 2.508, Toxic Substances (page 5-7)**

The currently approved statement was retained; “Toxic substances shall not be present in receiving waters, after mixing, in such quantities as to be toxic to human, animal, plant or aquatic

life or to interfere with the normal propagation, growth and survival of the indigenous aquatic biota.”

**Reg. 2.509, Nutrients (page 5-10 & 5-11)**

The phosphorus discharge limits were retained.

“All point source discharges into the watershed of waters officially listed on Arkansas’ impaired waterbody list (303d) with phosphorus as the major cause shall have monthly average discharge permit limits no greater than those listed below. Additionally, waters in nutrient surplus watersheds as determined by Act 1061 of 2003 Regular Session of the Arkansas 84<sup>th</sup> General Assembly and subsequently designated nutrient surplus watersheds may be included under this Reg. if point source discharges are shown to provide a significant phosphorus contribution to waters within the listed nutrient surplus watersheds.

<u>Facility Design Flow – mgd</u>	<u>Total Phosphorus discharge limit – mg/L</u>
= or > 15	Case by case
3 to <15	1.0
1 to <3	2.0
0.5 to <1.0	5.0
<0.5	Case by Case

For discharges from point sources which are greater than 15 mgd, reduction of phosphorus below 1 mg/L may be required based on the magnitude of the phosphorus load (mass) and the type of downstream waterbodies (e.g., reservoirs, Extraordinary Resource Waters). Additionally, any discharge limits listed above may be further reduced if it is determined that these values are causing impairments to special waters such as domestic water supplies, lakes or reservoirs or Extraordinary Resource Waters.”

**Reg. 2.510, Oil and Grease (page 5-11)**

The second to the last sentence of the paragraph was revised to state “Oil and grease shall be an average of no more than 10 mg/L or a maximum of no more than 15 mg/L.”

**Reg. 2.511(A), Mineral Quality (page 5-13)**

Remove the asterisks from the site specific criteria for Boggy Creek.

Boggy Creek - from the discharge for Clean Harbors El Dorado LLC to the confluence of Bayou de Loutre	631	63	1360
---	-----	----	------

**Reg. 2.511(A), Mineral Quality (page 5-14)**

Add asterisks from the site specific criteria for Dismukes Creek and Big Creek.

Dismukes Creek	26*	ER	157*
Big Creek from Dismukes to Bayou Dorcheat	20*	ER	200*

**Reg. 2.511(A), Mineral Quality (page 5-11 to 5-15)**

The table will be maintained as one table.

**Reg. 2.511(A), Mineral Quality (page 5-12)**

The proposed revision in the table regarding the Big Creek Ditch (Headwaters to unnamed trib) was deleted.

**Reg. 2.511(A), Mineral Quality (page 5-13)**

Bayou Bartholomew in the table was revised as follows:

Bayou Bartholomew	50-30	20 30	500 220
-------------------	-------	-------	---------

**Reg. 2.511(A), Mineral Quality (page 5-13)**

The following criteria was retained and the † was added.

Unnamed trib A to Flat Creek from mouth of EDCC 001 ditch to confluence with Flat Creek	16*†	80*†	315*†
Confluence with unnamed trib A to Flat Creek	23*†	125*†	475*†

A footnote was added to state: “† Not applicable for Clean Water Act purposes until approved by EPA.”

**Reg. 2.511(A), Mineral Quality (page 5-15)**

The double asterisk was retained as previously stated “\*\* - These limits shall apply to all tributaries of Bayou Meto and Bayou Two Prairie listed in Appendix A”. The single asterisk was retained as the following clarification. “\* - developed using background flow of 4 cfs”.

**Reg. 2.511(B), Mineral Quality (page 5-15)**

The paragraph was revised to state:

“The following values were determined from Arkansas' least-disturbed ecoregion reference streams are considered to be the maximum naturally occurring levels. For waterbodies not listed above, any discharge which results in instream concentrations more than 1/3 higher than these values for chlorides (Cl) and sulfates (SO<sub>4</sub><sup>=2</sup>) or more than 15 mg/l, whichever is greater, is considered to be a significant modification of the water quality maximum naturally occurring values. These waterbodies should be considered as candidates for site specific criteria development in accordance with Regs. 2.306 and 2.308. Similarly, ~~such modification exists site specific criteria development should be considered~~ if the following TDS values are exceeded after being increased by the sum of the increases to Cl and SO<sub>4</sub>. Such modifications criteria may be made developed only in accordance with Regs. 2.306 and 2.308. The values listed in the table below are not intended nor will these values be used by the Department to evaluate attainment of the water quality standards.”

**Reg. 2.512 (B), Ammonia (page 5-16)**

The heading will be revised to state “The monthly average concentration of total ammonia nitrogen shall not exceed those values shown as the chronic criterion in the following tables:”.

**Appendix A**

Proposed species additions to currently designated ESW streams have been stricken.

**Appendix A, Ouachita Mountains**

“southern hickorynut” was revised to “southern hickorynut” (page A-37)

The boxes with the numbers 6 and 7 were added to plate OM-2. (page A-43)

### **Appendix A, Gulf Coastal Plain**

“winger mapleleaf” was revised to “winged mapleleaf” (**page A-46**)

“Loutre creek” was revised to “Loutre Creek” (**page A-47**)

The boxes with the numbers 52, 53, and 54 were added to plate GC-4. (**page A-58**)

(GC-2, #51) was added to the end of “Boggy Creek from the discharge from Clean Harbors El Dorado LCC downstream to the confluence of Bayou de Loutre”

### **Appendix A, Delta**

“Total dissolved oxygen” was revised to “total dissolved solids”. (**page A-63**)

The boxes with the numbers 38, 39, and 40 were added to plate D-1. (**page A-67**)

### **Appendix C**

Proposed list of “Scientific Names of Aquatic and Semi-Aquatic Life Forms Protected Under the Ecologically Sensitive Waterbody Designated Use” has been stricken.